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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/526,558	03/04/2005	Leif Eriksen	PATRADE	9370				
James C Wray Suite 300 1493 Chain Bridge Road McLean, VA 22101	7590 05/09/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">MCGRAW, TREVOR EDWIN</td></tr></table>		EXAMINER		MCGRAW, TREVOR EDWIN	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,558	ERIKSEN ET AL.	
	Examiner	Art Unit	
	Trevor McGraw	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5 and 7 is/are rejected.
- 7) ☒ Claim(s) 2 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/02/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: In line 21 of Page 3, the following is stated: "Specific embodiments are possible and are described in the independent claims 2-6." Examiner objects to the specification as Applicant's claims 2-6 are not in independent form. Furthermore, Examiner requests that Applicant cancel the aforementioned language in the specification as the scope of the claims can change throughout prosecution of the application.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the fixed valve stem part" in line 4. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests making proper reference to the limitation "the fixed valve stem part" in Claim 3 or in any of the preceding claims from which Claim 3 depends to ensure proper antecedence is maintained within the claims. Examiner notes that not all valve stems have fixed parts and is unclear as to how Applicant's "fixed valve stem part" is distinguishable over the prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (JP61197757).

In regard to Claim 1, Suzuki et al. (JP61197757) teaches a valve that is configured to inject fluids in large engines that is arranged with a mounting means (33) for fastening in a cylinder wall (3) where a valve stem (21) extends through the cylinder wall (3) and at least one nozzle outlet (9) at the inner end of the valve stem (21) where the at least one nozzle outlet (9) is disposed in the inner valve stem part (21) and is rotatable relative to an outer valve stem part (22) where the outer valve stem part (22) is fixed to the mounting means (33).

In regard to Claim 3, Suzuki et al. also teaches where the rotatable valve stem (21) includes two annular clamping faces disposed on each side of an annular flange (26) which is formed on the fixed valve stem part (22) that provides a means for clamping the clamping faces against the flange (26) for securing mutual position of the two valve stem parts (21,22).

In regard to Claim 4, Suzuki et al. further teaches a valve that has at least one nozzle outlet (9) that is provided for forming one or more injection jets transversely of

the valve stem (Page 3: Upper Left Column, Lines 14-20; fuel injecting direction can be changed as needed at an optimal state depending on output conditions of the engine to reduce cost and heat load; See also Figure 2).

In regard to Claim 5, Suzuki et al. additionally teaches where the valve has at least one nozzle outlet (9) that is provided for forming one or more injection jets oriented symmetrically relatively to the valve stem (See Figure 6 where the spray is emitted in four jets that form a symmetrical spray pattern emitted from the valve stem).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (JP61197757) in view of Yamamoto et al. (US 5,740,777).

In regard to Claim 7, Suzuki et al. as taught and described above fails to teach where the valve includes a filter. However, Yamamoto et al. (US 5,740,777) teaches that it is known to have a filter included in a valve. It would have been obvious to one having ordinary skill in that art at the time the present invention was made to provide the valve of Suzuki et al. with the filter of Yamamoto et al., in order to provide for a manner that foreign combustion particle debris present in a vehicle fuel supply is filtered to

maintain the fuel supply octane integrity so that complete combustion occurs within the combustion chamber without foreign matter being introduced into the combustion process which could hinder an engines full operating capacity.

Allowable Subject Matter

Claims 2 and 6 are objected to as being dependent upon a rejected base claim, but appear to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

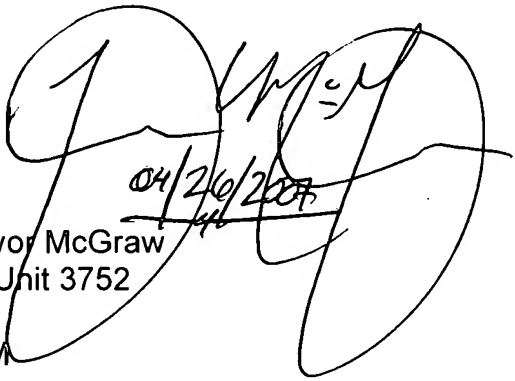
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thoma et al. (US 4,382,553), Moriyasu et al. (US 4,721,080), Kollmann (US 5,950,596), Koike et al. (US 6,045,063).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

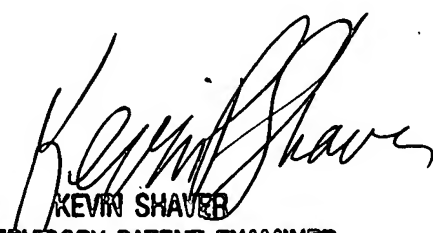
Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



04/26/2007
Trevor McGraw
Art Unit 3752

TEM



KEVIN SHAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700